EXHIBIT 1-c to PLAINTIFFS' APPENDIX OF EXPERT REPORTS

Expert Witness Report of G. Caleb Alexander, MD, MS

 $Appendix \; B-Curriculum \; vitae$

February 2020

CURRICULUM VITAE

G. Caleb Alexander, MD, MS

PERSONAL DATA

Business Address

Johns Hopkins School of Public Health Center for Drug Safety and Effectiveness Department of Epidemiology 615 N. Wolfe Street W6035 Baltimore, MD 21205

Phone: 410 955 8168 Fax: 410 955 0863

Email: galexand@jhsph.edu

Clinical Address

Johns Hopkins at Green Spring Station 10753 Falls Road Suite 325 Lutherville, MD 21093 Clinic Phone: 410 583 2926

Clinic Fax: 410 583 2883

EDUCATION AND TRAINING

1988-1990	Candidate for BA, Oberlin College
1991-1993	University of Pennsylvania, BA (Philosophy)
1994-1998	Case Western Reserve University, MD
1998-1999	Intern, Internal Medicine, University of Pennsylvania
1999-2001	Resident, Internal Medicine, University of Pennsylvania
2001-2003	Robert Wood Johnson Clinical Scholar, University of Chicago
2002-2003	University of Chicago, Department of Health Studies, MS

Medical Licensure

Maryland Physician and Controlled Substance License, through 9/30/20 Drug Enforcement Agency Controlled Substance Licensure, through 6/30/21

Medical Board Certification

American Board of Internal Medicine, through 12/31/22

PROFESSIONAL EXPERIENCE

2001-2003	Off-tour Attending Physician, Veterans Affairs Hospital, Hines, Illinois
2003-2005	Instructor, Division of General Medicine, University of Chicago
2003-2006	Affiliate Faculty, Robert Wood Johnson Clinical Scholars Program
2003-2012	Affiliate Faculty, MacLean Center for Clinical Medical Ethics
2005-	Adjunct Research Associate, Department of Pharmacy Practice, University of Illinois at
	Chicago School of Pharmacy

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2005-2011	Assistant Professor, Division of General Medicine, University of Chicago
2007-2012	Affiliate Faculty, Center for Interdisciplinary Health Disparities Research (CIHDR),
	University of Chicago
2011-2012	Associate Professor, Division of General Medicine, University of Chicago
2012-	Founding Co-Director, Johns Hopkins Center for Drug Safety and Effectiveness Hopkins
	University
2012-2018	Associate Professor of Epidemiology and Medicine, Johns Hopkins Bloomberg
	School of Public Health
2014-	Affiliate Faculty, Center for Health Services and Outcomes Research (CHSOR), Johns
2018-	Professor of Epidemiology and Medicine, Johns Hopkins Bloomberg School of Public
	Health

PROFESSIONAL ACTIVITIES

Society Membership and Leadership

1998-2001	Philadelphia County Medical Society
1998-2009	American Medical Association
1998-	Physicians for Social Responsibility
1998-	Alpha Omega Alpha Medical Honors Society
2000-	Society for General Internal Medicine
2000-	American College of Physicians
2003-2009	American Society of Bioethics and Humanities
2006-2007	Chair, Program Committee, RWJ Faculty Scholars National Meeting
2006	Member, Program Committee, RWJ Faculty Scholars National Meeting
2007-	International Society for Pharmacoeconomics and Outcomes Research (ISPOR)
2008	Selection Committee, Midcareer Research Mentorship Award, SGIM
2009-	International Society for Pharmacoepidemiology (ISPE)

Non-Commercial Advisory Boards

2000-2003	Transplant Task Force, End Stage Renal Disease Renal Network #9/#10
2005	American Society of Bioethics and Humanities President's Advisory Committee on
	Ethics Standards
2007-2011	Cost of Cancer Care Task Force, American Society of Clinical Oncology
2008-2016	Charter Member, IMS Health Services Research Network
2010-2014	FDA, Drug Safety and Risk Management Advisory Committees, Ad Hoc Member

- October 2010 Cardiovascular and Renal Committee (Darbapoeitin)
- October 2012 Endocrinologic and Metabolic Committee (lomitapide/mipomersen)
- July 2013 Arthritis Committee (Criteria for axial spondyloarthritis)
- November 2013 Peripheral & Central Nervous System Committee (Alemtuzumab)
- May 2014 Public Meeting (Post Marketing Requirements for Opioid Analgesics)
- July 2015 Bone, Reproductive and Urologic Drugs Committee (Flibanserin)
- December 2015 Pulmonary & Allergy Drugs Committee (Cough Syrup/Codeine)
- October 2016 Bone, Reproductive and Urologic Drugs Committee (desmopressin)
- November 2017 Psychopharmacologic Drugs Advisory Committee (buprenorphine)

2014-2019	Chairman, FDA Peripheral and Central Nervous System Drugs Advisory Committee
	• November 2015 Peripheral & Central Nervous System Committee (Drisapersen)
	 April 2016 Peripheral & Central Nervous System Committee (Eterplirsen)
	 April 2018 Peripheral & Central Nervous System Committee (Cannabidiol)
2015-2018	Center of Excellence for Comparative Effectiveness, University of Illinois at Chicago
2015-2017	Legal Science, LLC, contract through National Institutes of Drug Abuse to develop
	Prescription Drug Abuse Policy System
2016-	Scientific Advisory Board, Media Policy Center, Santa Monica, California
2016	Facilitator, Prioritizing Comparative Effectiveness Research Questions for Preventing
	Opioid Misuse in the Management of Pain: A Stakeholder Workshop (PCORI)
2020	U.S. Department of Health and Human Services, National Center for Health Statistics
	(NCHS), National Ambulatory Medical Care Survey (NAMCS) Workgroup
2020	Member, FDA Peripheral and Central Nervous System Drugs Advisory Committee

Commercial Advisory Boards

2007-2018	IQVIA Institute for Healthcare Informatics
2014-2016	PainNavigator, LLC, Minneapolis, Minnesota
2015-2019	Delta Faucet Company, Indianapolis, Indiana
2016-2018	MesaRx Innovations, New York, New York
2017-	OptumRX National P&T Committee

Other Commercialization Activity

2017- Co-Founder, Monument Analytics, A Health Care Consultancy

Testimony and Briefings (Non-Litigation)

2012	Food and Drug Administration (Drug Labeling for Prescription Opioids)
2015	U.S. Senate Veterans' Affairs Committee (Prescription Opioids)
2016	Centers for Disease Control and Prevention (Prescription Opioids)
2016	Committee on Health and Government Operations, Maryland House of Delegates
	(Prescription Drug Monitoring Programs)
2016	Food and Drug Administration (Prescription Opioids)
2016	National Academy of Sciences, Institute of Medicine (Regulation of Opioids)
2017	Senate Finance Committee, Maryland House of Delegates (Prescription Drug Pricing)
2017	U.S. House of Representatives, Congressional Oversight Committee (Opioid Epidemic)
2018	Briefing for U.S. Senate Staff Hosted by Senator Ben Cardin (Opioid Epidemic)
2018	National Academy of Science, Engineering and Medicine (Opioid Epidemic)
2019	Maryland House of Delegates (Prescription Drug Monitoring Program)
2019	National Academy of Science, Engineering and Medicine (Opioid Epidemic)

Other Testimony (Litigation)

- Expert Report in *In re: National Prescription Opiate Litigation*, Case No. 1:17-md-02804, in the U.S. District Court for the Northern District of Ohio (March 25, 2019, supplemented April 3, 2019, updated April 17, 2019 and October 8, 2019).
- Deposition Testimony in *In re: National Prescription Opiate Litigation*, Case No. 1:17-md-02804, in the U.S. District Court for the Northern District of Ohio (April 26, 2019).
- Expert Report in *State of Washington v. Purdue Pharma L.P. et al.*, Case No. 17-2-25505-0 SEA, in the Superior Court of Washington for King County (July 8, 2019).
- Disclosed as an expert witness in *State of Montana v. Purdue Pharma L.P. et al.*, Case No. 1:17-md-02804, in the Montana First Judicial District Court in Lewis & Clark County (August 1, 2019).

EDITORIAL ACTIVITIES

Peer Review Activities

Ad hoc reviewer – Journals

American Journal of Kidney Diseases Health Services Research

American Journal of Managed Care Hypertension

International Journal of Quality Improvement American Journal of Medicine

American Journal of Preventive Medicine **JAMA**

American Journal of Public Health Journal of American College Health

Journal of the American Pharmacists Association Annals of Internal Medicine Journal of the American Society of Nephrology Archives of Internal Medicine

BioMed Central (BMC) Gastroenterology Journal of Clinical Ethics

BioMed Central (BMC) Infectious Diseases

British Journal of Cancer British Medical Journal

Canadian Medical Association Journal

Clinical Therapeutics

CNS Drugs

Disease Management and Health Outcomes

Drugs

Health Affairs

Journal of General Internal Medicine

Journal of Rural Health

Medical Care

Medical Decision Making

Milbank Quarterly

New England Journal of Medicine

PharmacoEconomics

Pharmacoepidemiology and Drug Safety

Social Science and Medicine

Editorial Board Memberships

2007-2010	Medical Decision Making, Deputy Editor
2008-2012	Journal of General Internal Medicine, Deputy Editor
2008-2010	Society of General Internal Medicine Forum, Associate Editor
2010-2011	BMC Health Services Research, Associate Editor
2012-2014	Journal of the American Pharmacists Association (JAPhA), Editorial Board
2012-2014	Journal of General Internal Medicine, Editorial Board
2012-	Medical Care, Deputy Editor
2013-	Drug Safety, Editorial Board
2014-	Drugs – Real World Outcomes, Editorial Board

Grant Reviews

- 1. The Netherlands Organization for Health Research and Development (ZonMw), The Ministry of Health, Welfare, and Sport, The Hague, The Netherlands (2007)
- 2. The University of Chicago Program for Pharmaceutical Policy (2007-2010)
- 3. University of Chicago/University of Illinois at Chicago CDC Center for Health Promotion Economics (2007)
- 4. The University of Chicago Diabetes Research and Training Center (2008).
- 5. Agency for Healthcare Research and Quality, Special Emphasis Panel (R18), "Optimizing Prevention and Healthcare Management for the Complex Patient." March 2008.
- 6. RFA 09-003. NIH Challenge Grants in Health and Science Research (RC21). April 2009.
- 7. National Institute of Aging Special Emphasis Panel (PO1). Medical Professionalism and Healthcare

Grants. November 2009.

- 8. Agency for Healthcare Research and Quality Special Emphasis Panel (R18). Comparative Effectiveness Delivery System Demonstration Grants. July 2010.
- 9. Agency for Healthcare Research and Quality. Centers for Education and Research in Therapeutics (CERT) (U-19) Special Emphasis Panel. July 2011.
- 10. Swiss National Science Foundation. Drug Lag in Switzerland: Does it Exist and Why? June 2012.
- 11. Dutch Ministry of Health Grant Review. Optimizing the use of Over-the-Counter Medicines. October 2012.
- 12. Qatar National Research Fund Reviewer. November 2012.
- 13. Veterans Health Affairs Health Services Research and Development (HSR&D) Center of Innovation Review. February 2012.
- 14. Ad hoc reviewer. Agency for Healthcare Research and Quality. Health Care Research Training (HCRT) Study Section. January 2014 July 2015.
- 15. Ad hoc reviewer. Canadian Institutes of Health Research (CIHR). Review Committee for the Drug Safety and Effectiveness Network (DSEN) and the Strategy for Patient-Oriented Research (SPOR) Catalyst Grant: Methods in Post-Market Drug Safety and Effectiveness Research. January 2015.
- 16. Study section member. Agency for Healthcare Research and Quality. Health Care Research Training (HCRT) Study Section. August 2015 July 2018.
- 17. Chairman. Patient Centered Outcomes Research Institute. Clinical Strategies for Managing and Reducing Long-Term Opioid Use for Chronic Pain Merit Review. May 2016.
- 18. Chairman. Patient Centered Outcomes Research Institute. Clinical Strategies for Managing and Reducing Long-Term Opioid Use for Chronic Pain Merit Review. May 2017.
- 19. Chairman. Patient Centered Outcomes Research Institute. Assessment of Prevention, Diagnosis, and Treatment Options (APDTO) Program. August 2017.

HONORS AND AWARDS

Honors	
1993	Cum Laude, University of Pennsylvania
1997	Alpha Omega Alpha, Case Western Reserve University
2003-2005	John A. Oremus Memorial Scholar (\$40,000 Research Stipend), MacLean
	Center for Medical Ethics, University of Chicago
2006	Top 5% of reviewers, Medical Care (also received annually through 2011)
2007	Top 10% of reviewers, Ann Intern Med (also received 2008, 2009, 2014)
2011	Elected Fellow of the American College of Physicians (FACP)
2011	Top Reviewers, Pharmacoepidemiology and Drug Safety (annually through 2014)
Awards	
2001	Edward W. Holmes Resident Research Award, University of Pennsylvania

2006-2009	Robert Wood Johnson Foundation Faculty Scholar Career Development Award
2007	Research Finalist, International Society for Pharmacoeconomics and Outcomes
	Research, Annual Meeting
2008	Outstanding Physician Scientist Award, Central Society for Clinical Research
2008	Career development award (\$10,000 Research Stipend), Central Society for Clinical
	Research
2008	Department of Medicine Research Award (awarded to trainee for mentored research;
	also received by mentored trainees in 2009 and 2010)
2009	Pritzker School of Medicine Sigma Xi Award for Impact on Science (awarded to
	trainee for mentored research)
2017	Americal Society of Health-System Pharmacy, Drug Therapy Research Award
	(awarded to trainee for mentored research and cv publication #144)

PUBLICATIONS

Peer Reviewed Journal Articles (names of trainees are <u>underlined</u>)

- 1. Szele F, **Alexander GC**, Chesselet MF. "Expression of molecules associated with neuronal plasticity in the striatum after aspiration versus thermocoagulatory lesions in the adult cortex in adult rats." Journal of Neuroscience. 1995;15:4429-4448. PMID: 7790918
- 2. **Alexander GC**, Fera B, Ellis R. "From the students: learning continuous improvement by doing it." Joint Commission Journal on Quality Improvement. 1996;22:198-205. PMID: 8664952
- 3. **Alexander GC**, Sehgal AR. Dialysis patient assessments of the quality of medical care provided by generalists, nephrologists and other specialists. American Journal of Kidney Disease. 1998;32:284-289. PMID: 9708614
- 4. **Alexander GC**, Sehgal AR. Barriers to cadaveric renal transplantation among blacks, women, and the poor. JAMA. 1998;280:1148-1152. PMID: 9777814

Editorial: Milford EL. Organ transplantation--barriers, outcomes, and evolving policies. JAMA. 1998;280:1184-1185. PMID: 9777820

- 5. Lewin L, Agneberg B, **Alexander GC**. A course in end-of-life care for third year medical students. Academic Medicine. 2000:57:519-520. PMID: 10824792
- 6. **Alexander GC**, Sehgal AR. Why hemodialysis patients fail to complete the transplant process. American Journal of Kidney Disease. 2001;37:321-328. PMID: 11157373

Editorial: Chertow GM, Zenios SA. Gridlock on the road to kidney transplantation. American Journal of Kidney Disease. 2001;37:435-437. PMID: 11157389

7. Werner RM, **Alexander GC**, Fagerlin A, Ubel PA. The "hassle factor": How physicians respond when third party payers decline reimbursement for important health care services. Archives of Internal Medicine. 2002;162:1134-1139. PMID: 12020183

- 8. **Alexander GC**, Sehgal AS. Variation in access to kidney transplantation across dialysis facilities: using process of care measures for quality improvement. American Journal of Kidney Disease. 2002;40:824-831. PMID: 12324919
 - Editorial: Powe NR, Boulware LE. The uneven distribution of kidney transplants: getting at the root causes and improving care. American Journal of Kidney Disease. 2002;40:861-863. PMID: 12324926
- 9. **Alexander GC**, Werner RM, Fagerlin A, Ubel PA. Public support for physician deception of insurance companies. Annals of Internal Medicine. 2003;138:472-475. PMID: 12639080
- 10. **Alexander GC**, Wynia MK. Ready and willing? Physicians' sense of preparedness for bioterrorism. Health Affairs. September/October 2003;22:189-197. PMID: 14515895
- 11. **Alexander GC**, Casalino LP, Meltzer DO. Patient-physician communication about out-of-pocket costs. JAMA. 2003;290:953-958. PMID: 12928475
- 12. **Alexander GC**, Werner RM, Ubel PA. The costs of denying scarcity. Archives of Internal Medicine. 2004;164:593-596. PMID: 15037486
- 13. **Alexander GC**, Casalino LP, Tseng CW, McFadden D, Meltzer DO. Barriers to patient-physician communication about out-of-pocket costs. Journal of General Internal Medicine. 2004;19:856-860. PMCID: PMC1492500
- 14. **Alexander GC**, Tseng CW. Strategies to identify and assist patients burdened by out-of-pocket prescription costs. Cleveland Clinic Journal of Medicine. 2004;71:433-437. PMID: 15195778
- 15. Werner RM, **Alexander GC**, Fagerlin A, Ubel PA. Lying to insurance companies: the desire to deceive among physicians and the public. American Journal of Bioethics. 2004;4:1-7. PMID: 16192208
- 16. <u>Dai C</u>, Stafford RS, **Alexander GC**. National trends in Cox-2 inhibitor use since market release: non-selective diffusion of a selectively cost-effective innovation. Archives of Internal Medicine. 2005;165:171-177. PMID 15668363
 - Editorial: Solomon DH, Avorn J. Coxibs, science, and the public trust. Archives of Internal Medicine. 2005;165:158-160. PMID: 15668360
- 17. **Alexander GC,** Casalino LP, Metlzer DO. Physician strategies to reduce patients' out-of-pocket prescription costs. Archives of Internal Medicine. 2005;165:633-636. PMID: 15795338
- 18. Buss MK, **Alexander GC**, Switzer GE, Arnold RM. Assessing competence of residents to discuss end-of-life issues with patients. Journal of Palliative Medicine. 2005;8:363-371. PMID: 15890047
- 19. <u>Lang P, Schwarze M, Alexander GC</u>. New technologies meeting old professional boundaries: the emergence of carotid artery stenting. Journal of the American College of Surgery. 2005;200:854-860. PMID: 15922195
- 20. **Alexander GC**, <u>Mohajir N</u>, Meltzer DO. Consumers' perceptions about risk of and access to nonprescription medications. J Am Pharm Assoc. 2005;45:363-70. PMID: 15991758

- 21. Wang YR, **Alexander GC**, Meltzer DO. Lack of effect of guideline changes on LDL cholesterol reporting and control for diabetes visits in the U.S., 1995-2004. Diabetes Care. 2005;28:2942-4. PMID: 16306559
- 22. **Alexander GC**, <u>Kurlander J</u>, Wynia MK. Physicians in retainer ("concierge") practice: a national survey of physician, patient, and practice characteristics. Journal of General Internal Medicine. 2005;20:1079-83. PMCID: PMC1490281
- 23. **Alexander GC**, Lantos J. The doctor-patient relationship in the post-managed care era. American Journal of Bioethics. 2006;6:29-32. PMID: 16423784
- 24. Wang YR, **Alexander GC**, Meltzer DO. Screening and use of cholesterol-lowering drug therapy for primary and secondary prevention of coronary heart disease, 1999 and 2003. Managed Care Interface. 2006;19:25-30. PMID: 16453992
- 25. Piette J, Heisler M, Horne R, **Alexander GC**. A conceptually-based approach to understanding chronically-ill patients' responses to medication cost pressures. Social science and medicine. 2006;62:846-857. PMID: 16095789
- 26. Holmes HM, Cox-Hayley DM, **Alexander GC**, Sachs GA. Reconsidering medication appropriateness for patients late in life. Archives of Internal Medicine. 2006;166:605-609. PMID: 16567597
- 27. <u>Schwarze ML</u>, <u>Sayla MA</u>, **Alexander GC**. Exploring patient preferences for infrainguinal bypass surgery. Journal of the American College of Surgery. 2006;202:445-452. PMID: 16500249
- 28. **Alexander GC**, Delisser HM, Hansen-Flaschen J, Lantos J. Shoring up professionalism: building upon disagreements between house officers and attending physicians. Canadian Family Physician. 2006;52:286-287. PMCID: PMC1479701
- 29. **Alexander GC**, <u>Sayla MA</u>, Holmes HM, Sachs GA. Prioritizing and stopping prescription medicines. Canadian Medical Association Journal. 2006;174:1083-1084. PMCID: PMC1421477
- 30. **Alexander GC**, Hall M, Lantos J. Rethinking professional ethics in the cost-sharing era. American Journal of Bioethics. 2006;6:W17-W22. PMID: 16885085
- 31. Federman AD, **Alexander GC**, Shrank WH. Simplifying the Medicare Prescription Drug Benefit for physicians and patients. Mayo Clinic Proceedings. 2006;81:1217-1221. PMID: 16970218
- 32. Quinn MT, **Alexander GC**, Hollingsworth D, O'Connor KG, Meltzer DO, for the Corporate Contributions for Life Consortium. Design and evaluation of a workplace intervention to promote organ donation. Progress in Transplantation. 2006;16:253-259. PMID: 17007162
- 33. <u>Colker TR</u>, Casalino LP, **Alexander GC**, Lantos J. Should our well-child care system be redesigned? A national survey of pediatricians. Pediatrics. 2006;118:1852-1857. PMID: 17079554
- 34. **Alexander GC**, Larkin G, Wynia MK. Preparedness for bioterror and competing public health priorities: a national survey of primary care and emergency physicians. Academic Emergency Medicine. 2006;13:1238-1241. PMID: 16614456
- 35. Wang YR, **Alexander GC**, Stafford RS. Outpatient treatment and control of hypertension in Western Europe and the United States. Archives of Internal Medicine. 2007;167:141-147. PMID: 17242314

- 36. <u>Schwarze ML</u>, <u>Sayla MA</u>, **Alexander GC**. A comparison of patient and physician beliefs about infrainguinal bypass surgery: what role should surgical optimism play? Surgery. 2007;141:239-244. PMID: 17263981
- 37. Casalino LP, **Alexander GC**, Jin L, Konetzka T. General internists' views on pay-for-performance and public reporting of quality scores: a national survey. Health Affairs. 2007;26:492-499. PMID: 1733967
- 38. Pham HH, **Alexander GC**, O'Malley AS. Physician consideration of patients' out-of-pocket costs in making common clinical decisions. Archives of Internal Medicine. 2007;167:663-668. PMID: 17420424
- 39. <u>Torke A.</u> Alexander GC, Lantos J, Siegler M. The doctor-surrogate relationship. Archives of Internal Medicine. 2007;167:1117-1121. PMID: 17563018
- 40. <u>Kuwabara SA</u>, Van Voorhees BW, Gollan JK, **Alexander GC**. A qualitative exploration of depression in emerging adulthood. General hospital psychiatry. 2007;29:317-324. PMCID: PMC2769013
- 41. Tseng CW, Brook RH, Keeler E, Steers WN, **Alexander GC**, Waitzfelder BE, Mangione CM. Elderly patients' preferences and experiences with providers in managing their drug costs. Journal of the American Geriatrics Society. 2007;55:1974-1980. PMID: 1794489
- 42. <u>Phongsak SK</u>, Wynia MK, Gadon M, **Alexander GC**. Original Communication: A Qualitative Study of Physicians' Engagement in Reducing Health Care Disparities. Journal of the National Medical Association. 2007;99:1315-1322. PMCID: PMC2575935
- 43. Yin W, Basu A, Zhang J, <u>Rabbani A</u>, Meltzer DO, **Alexander GC**. Impact of the Medicare Part D Prescription Drug Benefit on drug utilization and out-of-pocket expenditures. Annals of Internal Medicine. 2008;148:169-177. PMID: 18180465

Editorial: Stuart B. Where are the Medicare Part D claims data? Annals of Internal Medicine. 2008;148:1-2. PMID: 18180463

- 44. **Alexander GC**, Zhang J, Basu A. Characteristics of patients receiving pharmaceutical samples and association between sample receipt and out-of-pocket prescription costs. Medical Care. 2008;46:394-402. PMID 18362819
- 45. **Alexander GC,** Lin S, <u>Sayla M</u>, Wynia MK, Writing for the Data Committee of the Commission to End Health Care Disparities. Development of a measure of physician engagement in addressing racial and ethnic health care disparities. Health Services Research. 2008;43(2):773-84. PMCID: PMC2442375
- 46. <u>Rabbani A</u>, Alexander GC. Out-of-pocket and total costs of fixed dose combination antihypertensives and their components. American Journal of Hypertension. 2008;21(5):509-13. PMID: 18437141

Editorial: Arredondo A. Out-of-pocket costs to users: medicine options for hypertension. American Journal of Hypertension. 2008;21:492–492. PMID: 18437138

47. <u>Torke A</u>, Simmerling M, Siegler M, Kaya D, **Alexander GC**. Rethinking the ethical framework for surrogate decision-making: a qualitative study of physicians. Journal of Clinical Ethics. 2008;19:110-119. PMID: 18767471

- 48. <u>Torke A.</u> Alexander GC, Lantos J. Substituted judgment: the limitations of autonomy in surrogate decision-making. Journal of General Internal Medicine. 2008;23:1514-1517. PMCID: PMC2518005
- 49. Zhang J, Yin W, Sun S, **Alexander GC**. Impact of the Medicare Prescription Drug Benefit on the use of generic drugs. Journal of General Internal Medicine. 2008;23:1673-1678. PMCID: PMC2533371
- 50. **Alexander GC**, Sehgal NL, <u>Moloney RM</u>, Stafford RS. National trends in treatment for Type 2 diabetes mellitus, 1994-2007. Archives of Internal Medicine. 2008;168:2088-2094. PMCID: PMC2868588
- 51. Epstein AJ, Rathore SR, **Alexander GC**, Ketcham J. Physicians' Views on Access to Prescription Drugs under Medicare Part D. American Journal of Managed Care. 2008;14:SP5-SP13. PMID: 18991482
- 52. Peek ME, Tang H, **Alexander GC**, Chin MH. National prevalence of lifestyle counseling or referral among African Americans with diabetes. Journal of General Internal Medicine. 2008;23:1858-1864. PMCID: PMC2585691
- 53. Walton SM, Schumock GT, Lee KV, **Alexander GC**, Meltzer D, Stafford RS. Prioritizing medications for policy and research initiatives examining off-label prescribing. Pharmacotherapy. 2008;28:1443-1452. PMID: 19025425
- 54. <u>Qato DM</u>, **Alexander GC**, Conti RM, Johnson M, Schumm P, Lindau ST. Use of prescription and overthe-counter medicines and dietary supplements among older adults in the United States: findings from a population-based study. JAMA. 2008;300:2867-2878. PMCID: PMC2702513
- 55. <u>Schwarze ML</u>, <u>Sayla MA</u>, **Alexander GC**. Do patients with poor outcomes regret having had infrainguinal bypass surgery? Journal of Surgical Research. 2009;151:6-9. PMID: 17644108
- 56. **Alexander GC**, Stafford RS. Does comparative effectiveness have a comparative edge? JAMA. 2009;301:2488-2490. PMID 19531789
- 57. <u>Rabbani A</u>, **Alexander GC**. Determinants of health care use among children: evidence from rural Bangladesh. Journal of Biosocial Science. 2009;41:645-660. PMID: 19531272
- 58. Chen DT, Wynia MK, Moloney RM, Alexander GC. Physician knowledge of the FDA-approved indications of commonly prescribed drugs: results of a national survey. Pharmacoepidemiology and Drug Safety. 2009;18:1094-100. PMID: 19697444
- 59. <u>Caskey R</u>, Lindau ST, **Alexander GC**. Knowledge and early adoption of the HPV vaccine among adolescent girls and young women: results of a national survey. Journal of Adolescent Health. 2009;45:453-462. PMID: 19837351
 - Editorial: Rodewald LE, Orenstein WA. Vaccinating adolescents new evidence of challenges and opportunities. Journal of Adolescent Health. 2009;45:427-429. PMID: 19837347
- 60. Rathore SR, Ketcham J, **Alexander GC**, Epstein AJ. Influence of Patient Race on Physician Prescribing Decisions: A Randomized On-line Experiment. Journal of General Internal Medicine. 2009;11:1183-1191. PMCID: PMC2771231
- 61. <u>Rabbani A</u>, **Alexander GC**. Cost savings associated with filling a three month supply of prescription medicines. Applied Economics and Health Policy. 2009;7:255-264. PMID: 19905039

- 62. <u>Torke AM</u>, Siegler M, Abalos A, <u>Moloney R</u>, **Alexander GC**. Physicians' experience with surrogate decision making for hospitalized adults. Journal of General Internal Medicine. 2009;24:1023-1029. PMCID: PMC2726893
- 63. <u>Rabbani A</u>, **Alexander GC**. The impact of family structure on stimulant use among children with Attention Deficit Hyperactivity Disorder. Health Services Research. 2009;44:2060-2078. PMID: 19732168
- 64. **Alexander GC**, Humensky J, <u>Guerrero C</u>, <u>Park H</u>, Loewenstein G. Physician narcissism, ego threats, and confidence in the face of uncertainty. Journal of Applied Social Psychology. 2010;40:947-955.
- 65. Dorsey R, <u>Rabbani A</u>, <u>Gallagher SA</u>, Conti R, **Alexander GC**. The impact of black box warnings on the use of atypical antipsychotic medicines. Archives of Internal Medicine. 2010;170:96-103. PMID 20065205
 - Editorial: Rochon PA, Anderson GM. Prescribing optimal drug therapy for older people: sending the right message. Archives of Internal Medicine. 2010;170:103-106. PMID: 20065206
- 66. Basu A, Yin W, **Alexander GC**. The impact of Medicare Part D on Medicare-Medicaid dual-eligible beneficiaries' prescription utilization and expenditures. Health Services Research. 2010;45:133-151. (National Bureau of Economic Research [NBER] Working Paper #W14413) PMID: 20002765
- 67. <u>Cohen A, Rabbani A, Shah N, Alexander GC</u>. Changes in glitazone use among office-based physicians in the United States, 2003-2009. Diabetes care. 2010;33:823-825. PMCID: PMC2845035
- 68. <u>Torke AM</u>, <u>Moloney R</u>, Siegler M, Abalos A, **Alexander GC**. Physicians' views on the importance of patient preferences in surrogate decision making. Journal of the American Geriatrics Society. 2010;58:533-538. PMID: 20158556
- 69. Tseng C, Brook RH, **Alexander GC**, Hixon A, Keeler E, Mangione CM, Chen R, Jackson E, Adams Dudley R. Physicians' use of health information technology and knowledge of formularies, prescription copayments, and retail drug prices. American Journal of Managed Care. 2010;16:e105-e110. PMID: 2037031
- 70. <u>Lale A, Moloney RM</u>, **Alexander GC**. Academic medical centers and underserved communities: modern complexities of an enduring relationship. Journal of the National Medical Association. 2010;102:605-613. PMID: 20690324
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- 10. <u>Sayla M</u>, **Alexander GC**. An annotated bibliography exploring prescription cost-sharing. Prepared for the national meeting of the Society of General Internal Medicine. June, 2005. (annotated bibliography)
- 11. **Alexander GC**. Issue brief: Many physicians engaged in addressing health disparities. Developed on behalf of the Commission to End Health Disparities, April 2005. (issue brief)
- 12. **Alexander GC.** Geographic barriers and access to care. Virtual Mentor: Ethics Journal of the American Medical Association. 2005;7. Available at: http://www.ama-assn.org/ama/pub/category/15218.html Accessed July 5, 2005. (invited commentary).
- 13. **Alexander GC.** A crash course? What happens when a patient's medical and economic best interests collide? Virtual Mentor: Ethics Journal of the American Medical Association. 2006;8:147-149. (invited commentary)
- 14. Smith PJ, **Alexander GC**, Siegler M. Should editorials in peer-reviewed journals be signed? Chest. 2006;129:1395-1396. (Invited editorial)
- 15. **Alexander GC**, Lantos JD. Bioterrorism, public service, and the duty to treat. Cambridge Quarterly. 2006;15:422-423. (Invited commentary)
- 16. <u>Torke AM</u>, **Alexander GC**. Can healers have private lives? Virtual Mentor: Ethics Journal of the American Medical Association. 2006;8:441-448. Available at: http://www.ama-assn.org/ama/pub/category/16375.html Accessed July 26, 2006. (Invited commentary)
- 17. **Alexander GC**, Lantos J. The nuances of self-disclosure. Response to: "Physician self-disclosure in primary care visits: enough about you, what about me?" Arch Intern Med. 2008;168:242-244. (letter)

- 18. <u>Torke A</u>, **Alexander GC**, Lantos J, Siegler M. Response to letter regarding "The doctor-surrogate relationship." Archives of Internal Medicine. 2008;168:241-242. (letter)
- 19. **Alexander GC**. Dilemmas for a reason. Journal of Clinical Ethics. 2008;19:70-71. (Invited commentary)
- 20. <u>Lale A</u>, **Alexander GC**. The Urban Health Initiative: a story of one academic medical center and the underserved. SGIM Forum. December 2008. (Invited editorial)
- 21. <u>Torke AM</u>, **Alexander GC**, Lantos J. Substituted judgment. Journal of General Internal Medicine. 2009;24:146. (Letter to editor, reply).
- 22. <u>Saunders M</u>, **Alexander GC**. Turning and churning: loss of health insurance among adults in Medicaid. Journal of General Internal Medicine. 2009;24:133-4. (Invited editorial)
- 23. Walton SM, Schumock GT, Lee KV, **Alexander GC**, Meltzer D, Stafford RS. Importance of distinguishing supported and unsupported off-label use. Archives of Internal Medicine. 2010;170:657-658. (Letter to editor, reply)
- 24. <u>Qato DM</u>, **Alexander GC**. Response to: Hartung DM, Evans D, Haxby DG, Kraemer DF, Andeen G, Fagnan LJ. Effect of Drug Sample Removal on Prescribing in a Family Practice Clinic Ann Fam Med 2010 8:402-409. (Letter to editor, reply)
- 25. **Alexander GC**. Clinical prescribing (and off-label use) in a second-best world. Medical care. 2010;48:285-287. (Invited editorial)
- 26. Health IQ:2011. The Frontiers of Healthcare Advancement. IMS Institute for Healthcare Informatics. Diffusion of Innovation: Patterns and Effects. (Invited Chapter).
- 27. Alexander GC. Researcher's Corner: Talk Early and Often. SGIM Forum. 2011;34:5.
- 28. Dusetzina S, **Alexander GC**. Drug vs. Class-Specific Black Box Warnings: Does One Bad Drug Spoil the Bunch? Journal of General Internal Medicine. 2011;26:570-572. (Invited editorial)
- 29. **Alexander GC**. Seeding trials and the subordination of science. Arch Intern Med. 2011;171:1107-1108. (Invited editorial)
- 30. <u>deSouza JA</u>, **Alexander GC**. Unsupported off-label use of cancer therapies: new challenges in the era of biopharmaceuticals. Expert Review of Pharmacoeconomics & Outcomes Research. 2011;11:495-498. (Invited editorial)
- 31. Qato DM, Alexander GC. Just Because It's Low Cost Doesn't Mean It's Accessible. Journal of General Internal Medicine. 2012;27:1233-1234. (Invited editorial)
- 32. <u>Tan J</u>, **Alexander GC**, Segal JB. Academic Centers Play a Vital Role in the Study of Drug Safety and Effectiveness. Clin Ther. 2013;35:380-384. (Invited editorial)
- 33. **Alexander GC**. Curious Conundrums of Off-label Prescribing. PM&R. 2013;5:882-889. (Invited editorial)

- 34. <u>Fain K</u>, **Alexander GC**. Are FDA Prescription Drug Safety Plans Working: A Case Study of Isotretinoin. Pharmacoepidemiology and Drug Safety. Pending publication. (Invited editorial)
- 35. <u>Fain K</u>, **Alexander GC**. Are FDA Prescription Drug Safety Plans Working: A Case Study of Isotretinoin. Pharmacoepidemiology and Drug Safety. 2014;23:440-441. (Invited response to letter to the editor).
- 36. <u>Fain K</u>, **Alexander GC**. Drug Postmarketing Studies--Reply. JAMA. 2013;310:2459-2460. (Invited response to letter to the editor)
- 37. **Alexander GC**. Capsule Commentary on Faerber and Kreling, "Content Analysis of False and Misleading Claims in Television Advertising for Prescription and Nonprescription Drugs". Journal of General Internal Medicine. 2014;29:180. (Invited commentary)
- 38. <u>Fain K</u>, **Alexander GC**. Mind the Gap: Understanding the Effects of Pharmaceutical Direct-to-Consumer Advertising. Medical Care. 2014;52:291-293. (Invited editorial)
- 39. <u>Hwang CS</u>, **Alexander GC**. Commentary on "Tamblyn R, Eguale T, Huang A, Winslade N, Doran P. The incidence and determinants of primary nonadherence with prescribed medication in primary care: a cohort study. Ann Intern Med. 2014;160:441-50." Failure to Fill a First Prescription of a New Medication is Common in Primary Care Settings. BMJ Evidence Based Medicine. 2014;19:196. (Invited commentary)
- 40. <u>Fain K</u>, **Alexander GC**. Disposing of Medicines Safely. American Journal of Public Health. 2014;104:e2-3. (Letter to the editor)
- 41. <u>Daubresse M, Fain K, Alexander GC</u>. The Conversation. Upscheduling Hydrocodone. Pending publication. (Invited commentary)
- 42. <u>Riggs KR</u>, **Alexander GC**. Cost Containment and Patient Well-Being. Journal of General Internal Medicine. 2015;30:701-702. (Invited editorial)
- 43. **Alexander GC**, Keyes E. The Best Medicine: A Good Relationship With Your Doc. The Baltimore Sun. May 7, 2015. (Op-Ed)
- 44. <u>Lyapustina T</u>, **Alexander GC**. The Prescription Opioid Epidemic: A Problem of Our Own Making. The Pharmaceutical Journal, 13 June 2015, Vol 294, No 7866, online | DOI: 10.1211/PJ.2015.20068579 (Invited editorial)
- 45. Iyer G, **Alexander GC**. Cardiovascular Outcomes Associated with Clarithromycin. BMJ. 2016;352:i23 (Invited editorial)
- 46. Dy S, Wegener S, **Alexander GC**, Suarez-Cuervo C, Bass E. Comparative Effectiveness of Alternative Strategies for Decreasing Initiation of Opioids for Managing Chronic Pain. PCORI Topic Brief. The Johns Hopkins Evidence Based Practice Center. February 2016.
- 47. <u>Qato DM</u>, Alexander GC. Fish Oils and Bleeding: Where Is the Evidence? In Reply. JAMA Internal Medicine. 2016;176(9):1406-1407.
- 48. <u>Barrett K, Lucas E, Alexander GC</u>. How Polypharmacy Has Become a Medical Burden Worldwide. The Pharmaceutical Journal. June 9, 2016. Available at: http://www.pharmaceutical-journal.com

- 49. <u>Murimi IB</u>, **Alexander GC**. Opiate overdose as a patient safety problem [Perspective]. AHRQ PSNet [serial online]. May 2017. Available at: https://psnet.ahrq.gov/perspectives/perspective/225.
- 50. **Alexander GC**. In Ali AK, Hartzema AG (eds). Post-Authorization Safety Studies of Medicinal Products: The PASS Book. In press. (Forward)
- 51. Qato DM, **Alexander GC**, Lindau ST. AAP's Section on Integrative Medicine Suggests a More Balanced Approach to Dietary Supplement Data In Reply. Pediatrics. In press.
- 52. Herder MR, Doshi P, Wallach JD, et al. FDA to Begin Releasing Clinical Study Reports in Pilot Progamme. BMJ. 2018;360:k294. (Letter to the editor)
- 53. Mudumbai S, Stafford RS, **Alexander GC**. Having Surgery? Beware of Risk from Post-Op Opioids. USA Today. February 12, 2019. (Op-Ed)
- 54. **Alexander GC**, Sharfstein J. Opioid epidemic: Fighting addiction and chronic pain together to save lives. USA Today. April 25, 2019. (Op-Ed)
- 55. **Alexander GC**, Kolodny A. In Reply: Initial Opioid Prescriptions Among U.S. Commercially Insured Patients, 2012-2017. New England Journal of Medicine. May 2019. (Letter to editor)
- 56. <u>Heyward J</u>, Sharfstein S, **Alexander GC**. Assessing the Opioid Analgesic Risk Evaluation and Mitigation Strategy Program—Reply. JAMA Internal Medicine, 2020. (Invited response to letter to the editor)
- 57. **Alexander GC**, Kesselheim AS, Moore TJ. Searching for an Effective Covid-19 Treatment: Promise and Peril. STAT. April 10, 2020. (Op-Ed)

Monographs, book chapters and other scientific reports

- 1. **Alexander GC,** Wynia MK. Survey research in bioethics. In "Empiric Methods for Bioethics: A Primer." Eds: Jacoby L, Siminoff LA. Elsevier Press, New York, New York, 2007".
- 2. Quinn MT, Gnepp J, **Alexander GC**, Hollingsworth D, O'Connor KG, Lang W, Klayman J, Meltzer DO. Design and Evaluation of Worksite Promotions of Organ Donation: Real-world Challenges and Practical Solutions. In "Understanding organ donation: applied behavioral science perspectives." Eds: Siegel JT, Alvaro EM. Blackwell/Claremont Applied Social Psychology Series. Wiley-Blackwell, Chichester, West Sussex, United Kingdom, 2010.
- 3. Saunders M, **Alexander GC**, Siegler M. Clinical ethics and the practice of hospital medicine. In "Principles and Practice of Hospital Medicine." Eds: McKean, Ross, Dressler, Brotman, Ginsberg. McGraw-Hill Companies, 2012 (2nd Edition printed 2016).
- 4. **Alexander GC**, Frattaroli S, Gielen AC, eds. The Prescription Opioid Epidemic: An Evidence-Based Approach. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland: 2015
- 5. Citizen Petition to the Food and Drug Administration (Signatory). Requesting that the Commission to the FDA place a black box warning on pharmaceuticals in the opioid and benzodiazepine classes warning patients of the potential serious risks with concomitant use of both classes of medications. Submitted February 22, 2016. Petition granted August 31, 2016. Petition available at: http://health.baltimorecity.gov/sites/default/files/Final%20Draft%20FDA%20petition-Full%20Co-Signers-2.19.16%20(2)%20(1).pdf (Accessed September 1, 2016).
- 6. Working Group Member. Transparency at the U.S. Food and Drug Administration: Recommendations to Support the Development of Safe and Effective Medical Products. October 2016.
- 7. Working Group Member. Partnership Forum: Navigating Innovations in Diabetes Care. Journal of Managed Care and Specialty Pharmacy. December 2016.
- 8. Sharfstein JM, Miller JD, Davis AL, Ross JS, McCarthy ME, Smith B, Chaudhry A, Alexander GC, Kesselheim AS. Blueprint for Transparency at the U.S. Food and Drug Administration: Recommendations to Advance the Development of Safe and Effective Medical Products. January 22, 2017.
- 9. **Alexander GC**, Frattaroli S, Gielen AC, eds. The Opioid Epidemic: From Evidence to Impact. Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland: 2017.
- 10. Bicket MC, **Alexander GC.** Physician Prescribing Guidelines and Improving Opioid Stewardship. In "The Public Health Guide to Ending the Opioid Epidemic." In press.

Other

Designed and hosted a web site devoted to patient education and empowerment regarding prescription costs and polypharmacy. Previously available (2005-2012) at: http://prescriptions.bsd.uchicago.edu/

CURRICULUM VITAE

G. Caleb Alexander, MD, MS

PART II

TEACHING (Johns Hopkins University, 2012-present)

Graduate students (iMPH or MPH Advisor)

- Vibhuti Arya, PharmD; Academic Advisor for Part-time iMPH Program, 2012-2016
- Haley Gibbs, PharmD; Academic Advisor for Part-time iMPH Program, 2012-2015
- Ayu Katada; Academic Advisor for MPH Program (MPA/MBA Dual Degree), 2012-2014
- Etka Argawal; Academic Advisor for MPH Program in Epidemiologic and Biostatistical Methods for Public Health and Clinical Research, 2013-2014
- Lee Meller, MD; Academic Advisor for Part-time iMPH Program, 2013-2014
- Sharonjit Sagoo, PharmD; Academic Advisor for Part-time iMPH Program, 2015-
- Carolyn Tieu, PharmD, Academic Advisor for MPH Program, 2016-2017
- Ken Ogasawara, PhD, Academic Advisor for MPH Program, 2016-2017
- Denise Lepley, Academic Advisor for Part-time iMPH Program, 2017-2018
- Juan Franco, MD, Academic Advisor for Part-time iMPH Program, 2018-2020
- Varsha Lalchandani, Academic Advisor for Part-time iMPH Program, 2018-
- Rachel McFadden, Academic Advisor, Bloomberg American Health Fellow, 2019-

Graduate students (MHS Advisor)

- Francine Chingcuanco; Academic Advisor for MHS Program in Cardiovascular Epidemiology, 2014-2016
- Geetha Ayer; Academic Advisor for ScD Program in Cardiovascular Epidemiology, 2014-2016
- Meijia Zhou; Academic Advisor for MHS Program in General Epidemiology and Methodology, 2012-2014
- Jeffrey Yu; Academic Advisor for MHS Program in Health Economics, 2017-2018
- Hanzhe Shang; Academic Advisor for MHS Program in General Epidemiology and Methodology, 2017-2019

Graduate students (Capstone or Thesis Advisor)

- Ayu Katada; Academic Advisor for MPH Program (MPA/MBA Dual Degree), 2012-2014
- Jinhee Moon, MHS; Capstone Advisor for MPH Program, 2012-2013 (Outstanding Achievement Award)
- Steven Jones; Capstone Advisor for MPH Program, 2012-2013
- David Nartey; Capstone Advisor for MPH Program, 2012-2013
- Tatyana Lyapustina; Capstone Advisor for MPH Program (MD/MPH Dual Degree), 2014-2015
- James Goldberg; Capstone Advisor for iMPH Program, 2015-2016
- Zoya Fansler; Capstone Advisor for Part-time iMPH Program, 2015-2016
- Jeong Ah Cho; Capstone Advisor for MPH Program (MPH/MBA Dual Degree), 2016-2018
- Shengyuan (David) Luo; Thesis Co-Advisor for MHS Program, 2016-2018
- Yunwen Xu; Thesis Advisor for MHS Program, 2016-2018
- Omar Mansour; Thesis Advisor for MHS Program, 2016-2018
- Jeffrey Rollman; Capstone Advisor for MPH Program, 2017-2018
- Nune Makarova; Capstone Advisor for MPH Program, 2017-2018
- Nisha Parikh; Capstone Advisor for MPH Program, 2018-2019

- Xintong Li; Thesis Advisor for MHS Program, 2017-2019
- Juan Franco, MD, Capstone Advisor for Part-time iMPH Program, 2018-2019
- Paul O'Malley, Capstone Advisor for Part-time iMPH Program, 2019-
- Stephen Sander, Capstone Advisor for Part-time iMPH Program, 2020-

Graduate Students (Doctoral Advisor or Dissertation Committee Member)

- Kevin Fain, Dissertation Committee Member (DrPH/Epidemiology), 2012-2015
- Jingwen Tan, Dissertation Committee Member (PhD/Clinical Epidemiology), 2012-2016
- Shilpa Viswanathan, Dissertation Committee Member (PhD/Clinical Epidemiology), 2012-2015
- Richard Scott Swain, Dissertation Committee Member (PhD/Clinical Epidemiology), 2013-2015
- Christopher Kaufman, Dissertation Committee Member (PhD/Mental Health), 2013-2015
- Christine Buttorff, Dissertation Committee Member (PhD/Health Policy and Management), 2012-2014
- Remingon Nevin, Dissertation Committee Member (PhD/Mental Health), 2014-2017
- Mariana Socal, Dissertation Committee Member (PhD/Mental Health), 2014-2017
- Lisa Selker, Dissertation Committee Member (PhD/University of North Carolina Rollings School of Public Health), 2015-
- Sheriza Bakst, Doctoral Advisor (PhD/Epidemiology), 2015-2018
- Alex Secora, Doctoral Advisor (PhD/Epidemiology), 2016-2019
- Lucy Qiao, Doctoral Co-Advisor (PhD/Epidemiology), 2017-
- Kathleen Anderson, Doctoral Co-Advisor (PhD/Epidemiology), 2018-
- Jiajun Wen, Dissertation Committee Member (PhD/Epidemiology), 2018-
- Thomas Metkus, Dissertation Committee Member (PhD/Graduate Training Program in Clinical Investigation [GTPCI]), 2019-
- Lin Wang, Doctoral Co-Advisor (PhD/Epidemiology), 2019-
- Katherine Ozenberger, Dissertation Committee Member (PhD/University of Illinois School of Pharmacy), 2019-
- Bingkai Wang, Dissertation Committee Member (PhD/Biostatistics), 2020-
- Lisa Dwyer, Part-time/online DrPH Program, Academic Advisor, 2020-
- Jennifer Black, Part-time/online DrPH Program, Academic Advisor, 2020-

Other Trainees (Post-doctoral or beyond)

- Kevin Riggs, MD; Mentor for research program examining generic utilization and effect of drug coupons on drug utilization and expenditures, 2013-2016
- Mark Bicket, MD; Mentor of career development award activities focused on utilization, safety and effectiveness of prescription opioids in peri-operative setting, 2016-2018

Classroom Instruction

- Designer and Instructor, Pharmacoepidemiology: Drug Utilization, 2014-present (340.684.01)
- Co-Instructor, Design of Epidemiologic Studies: Proposal Development & Critique, 2015-present (340.715.01)
- Lecturer, Epidemiology of Aging (340.616.01)
- Lecturer, Pharmacoepidemiology Methods (340.682.01)
- Small Group Facilitator: Clinical Epidemiology, Johns Hopkins School of Medicine, 2014-2016
- Graduate Summer Institute of Epidemiology and Biostatistics: Pharmacoepidemiology (340.617.11)
 - o Lecturer, 2012-2016
 - o Designer and Co-Instructor, 2017-present
 - o Excellence in Teaching Distinction for Course

• Lecturer, Graduate Training Program in Clinical Investigation, Principles of Drug Development, 2017-present

Other significant teaching

- Participate in informal mentoring with dozens of students through works in progress, journal clubs and seminar series within the Departments of Epidemiology (School of Public Health) and the Division of General Internal Medicine (Johns Hopkins Medicine)
- Co-lead Special Seminar Series "Pharmaceutical Safety, Value and Innovation" sponsored by Center for Drug Safety and Effectiveness

TEACHING (University of Chicago, 2001-2012)

Undergraduate students

Mounica Yanamandala, University of Chicago, Primary mentor (2009-2011)

Regina Depietro, University of Chicago, Primary mentor (2009-2011)

Mateusz Ciejka, University of Chicago, Primary mentor (2009-2010)

Sarah Gallagher, University of Chicago, Primary mentor (2008-2009)

Maliha Darugar, University of Chicago, Primary mentor (2003-2006)

Nadiah Mohajir, Harris School for Public Policy, Honors thesis advisor (2002-2003)

Diane McFadden, University of Chicago, Primary mentor (2002-2003)

Graduate students

Frank Liu, Department of Pharmacy Administration, College of Pharmacy, University of Illinois at Chicago, Thesis committee (2008-2010)

Teri Arthur, PhD, MSW, Social Services Administration, Dissertation Committee (2004-2008)

Carolanne Dai, PhD, Harris School of Public Policy, Dissertation Committee (2002-2007)

Sachiko Kuwabara, BA, Masters of Arts, University of Chicago (2004-2006)

Melissa Brown, BA, Masters of Arts, University of Chicago (2005-2006)

Medical students

Erica MacKenzie, BA, Research Mentor (2011)

Daniel Kozman, BA, Research Mentor (2010)

Jessica Pirella, BA, Research Mentor (2010)

Andrew Cohen, BA, Research Mentor (2009)

Michelle Stacey, BA, Research Mentor (2009)

Karen Draper, BA, Research Mentor (2008)

Allison Lale, BA, Research Mentor (2008)

Rob Guzy, MD, PhD, Residency Advisor (2007)

Susanne Phongsak, BA, Research Mentor (2006)

Cesar Guerrero, BA, Research Mentor (2006)

Patrick Lang, BA, Research Mentor (2004)

Charles Kaufmann, MD, PhD, Residency Advisor (2004-2005)

Stephanie Takahashi, MD, Residency Advisor (2005-2006)

Residents

Victoria Wong, MD, Editorial fellow, Journal of General Internal Medicine (2009-) Femi Aboyeji, MD, Research elective mentor (2007)

Fellows

Jonas DeSouza, MD (2010-2012)

David Brush, MD (2009-2012)

Milda Saunders, MD, MPH (2008-2012)

Health services research fellows. University of Chicago (2004-2012)

MacLean Center for Clinical Medical Ethics, Lecturer (2003-2012)

Rachel Caskey, MD, Primary mentor (2006-2008)

Alexia Torke, MD, HRSA Fellow, Primary mentor (2005-2007)

Tumaini Colker, MD, MBA, Robert Wood Johnson Clinical Scholar (2005-2006)

Gretchen Schwarze, MD, MPH, Vascular Surgery (2003-2006)

Post-doctoral fellows

Dima Qato, PharmD, MPH, PhD (2011)

Atonu Rabbani, PhD (2007-2009)

Classroom Instruction

Lecturer, The doctor-patient relationship in clinical practice (2002-2011)

Lecturer, MacLean Center for Clinical Ethics Summer Intensive (2003-2011)

Designer and lecturer, Research Design Course for RWJF Clinical Scholars (2004-2006)

Designer and lecturer, Research Design Course for Fellow Summer Intensive (2004-2006)

Lecturer, Introductory Course on the fundamentals of health services research

Other significant teaching

Group leader for medical student summer research program (2004-2011)

National Youth and Leadership Forum, Faculty participant (2005-2010)

Participant in 1:1 Mentoring Program, Society of General Internal Medicine, 2007

RESEARCH GRANT AND CONTRACT PARTICIPATION

Current support

Grant: 5 R21AG058132-02; 9/15/18 – 8/31/20; National Institute on Aging (Andersen)

Purpose: To quantify the effect of drug utilization management in the Medicare Part D program

Grant: 3/1/2019 - 2/29/2020; Cardinal Health (Qato)

Purpose: To conduct a pilot study exploring the potential role of telepharmacy in improving medication

adherence in urban areas

Grant: 1 T32 HL139426-01; 12/27/2017 – 12/26/2022; National Heart, Lung and Blood Institute

(Alexander/Segal)

Purpose: To optimize the safe and effective use of medicines to treat heart, lung and blood diseases

Grant: R01DK115534-01A1; 8/01/18 07/31/22; National Institutes of Diabetes and Digestive and Kidney Diseases (Grams/Inker)

Purpose: To investigate the risk and benefits of specific medications across the range of kidney function within 5 large, global electronic health records

Grant: 1R01DA044987-01; 9/30/2017 – 7/31/2021; National Institutes of Drug Abuse (McGinty/Rutkow)

Purpose: To quantify the effect of state laws intended to curb high-risk opioid prescribing

Grant: 1R01DA042738-01; 02/01/17–11/30/20; National Institutes of Drug Abuse (Rutkow)

Purpose: To assess the association between clean indoor air laws, cigarette taxes, and use of smoking

cessation treatments

Grant: 1 U01 FD005942-01; 9/1/2018-8/31/2022; Food and Drug Administration (Alexander) Purpose: To enhance regulatory science through a unique FDA-academic partnership (CERSI)

Grant: 05/01/2019 - 04/30/2020; The Arnold Foundation (Andersen)

Purpose: To evaluate and advance policy recommendations to achieve a "fair price" of high cost prescription

drugs

Past support (selected list)

Grant: 3R01DA044987-03S1; 8/1/2019 – 10/31/2019; National Institutes of Drug Abuse (McGinty/Rutkow)

Purpose: Landscape Review of U.S. Health Professional Pain Management Curricula

Grant: 8/1/17-4/30/19; The Arnold Foundation (Andersen)

Purpose: To evaluate and advance policies to achieve a "fair price" of high cost prescription drugs

Grant: 5/5/2017- 1/30/2018; Department of Health and Human Services/ASPE (Alexander)

Purpose: To describe the breadth and depth of coverage policies for acute and chronic back pain among a nationally representative selection of Medicaid, Medicare Advantage and commercial health plans

Grant: 7/1/2016-4/4/2017; AstraZeneca (Alexander)

Purpose: To quantify the disease burden and resource utilization associated with Systemic Lupus

Erythematosus (SLE)

Grant: 12/2/2016-6/30/2017; AstraZeneca (Alexander)

Purpose: To characterize the association between organ damage, quality of life, and mortality among patients

with Systemic Lupus Erythematosus (SLE)

Grant: ID# 72452; 2/15/2015-1/31/2017; Robert Wood Johnson Foundation (Rutkow)

Purpose: To understand role of interorganizational relationships, information sharing and legally established infrastructure on prescription drug monitoring programs' function and impact within the public health system

Grant # U01FD005556: 09/15/15-08/31/16; Food and Drug Administration (Varadhan)

Purpose: To develop structural nested models to assess safety and effectiveness of generic drugs

Grant: 1 R01 HL 107345-01; 4/1/11-3/31/15; NHLBI (Alexander, Co-PI)

Purpose: To examine the effect of DTCA on prescription and non-prescription health care utilization

Grant: 1 R01 AG034187-01; 7/1/2012-6/30/2015; National Institutes on Aging (Kaestner)

Purpose: To determine if Part D Prescription Coverage Improves Health and Reduces Inpatient Use

Grant: 1 UO1 CE002499-01; 9/1/2014-9/1/2016; Center for Disease Control and Prevention (Alexander) Purpose: To evaluate the effect of Florida's Pill-Mill Law on opioid prescribing, utilization and dispensing

Grant: ID# 24741; 7/1/2014-1/1/2016; Robert Wood Johnson Foundation (Alexander)

Purpose: To evaluate the effect of Prescription Drug Monitoring Programs on opioid prescribing, utilization

and dispensing

Grant: 1 R01 HS 018960–01; 8/1/10-7/31/14; Agency for Health Care Quality and Research (Alexander)

Purpose: To assess the effect of FDA advisories on provider, patient, and firm behavior

Grant: 1 K08 HS15699-01A1; 2/01/06-2/01/11; Agency for Health Care Quality and Research (Alexander)

Purpose: To conduct a randomized trial to reduce patient's out-of-pocket prescription costs

Grant: Robert Wood Johnson Physician Faculty Scholars Award; 7/1/06-6/30/09; RWJ Foundation (Alexander)

Title: Development and evaluation of interventions to reduce patients' prescription costs

Contract: IMS Health Services Research Network; 10/1/10-12/31/11; IMS Health (Alexander)

Purpose: To develop and promote academic research network using IMS Health's data assets to address questions relevant to health care reform

Grant: UL1RR024999; 12/1/09-11/30/10; CTSA Institutional Pilot (Alexander)

Purpose: To quantify the impact of FDA advisories on psychotropic medication use among children

Grant: The University of Chicago Program for Pharmaceutical Policy; 2/01/05-6/1/09; The Merck Foundation (Meltzer)

Purpose: To foster innovative research at the University of Chicago in pharmaceutical policy with a focus on regulation, innovation, and technology assessment

Contract: HHSA 290 200 500 381; 9/16/05-9/15/10; Agency for Health Care Quality and Research (Schumock) Title: Chicago Area Pharmaceutical Outcomes Research Consortium. Developing Evidence to Inform Decisions about Effectiveness: The DEcIDE Network

Grant: The Greenwall Foundation; 7/1/10-6/30/11 (Alexander)

Purpose: To conduct a mixed-methods study to examine management of conflict between physicians and surrogates of critically ill adults

Grant: Center for Education and Research on Therapeutics (CERT); 09/01/07 – 3/31/11; Agency for Health Care Quality and Research (Meltzer)

Purpose: To create an education and research infrastructure that produces and disseminates knowledge to improve the effectiveness and cost-effectiveness of the use of therapeutics

Grant: Mixed-methods exploration of the adoption of the HPV Vaccine; 10/1/07-9/30/08; University of

Chicago Program for Pharmaceutical Policy Pilot Grant (Alexander)

Purpose: To establish prevalence and determinants of HPV vaccine uptake

Contract: HHSA29020050038I; 9/15/06-1/29/07; AHRQ (Walton)

Purpose: To develop a method of prioritization of research efforts on off-label drug use

Grant: R39OT03411-01-00; 10/01/04-09/30/07; Health Resources and Services Administration Division of Transplantation (Lang)

Purpose: To develop, implement, and assess workplace intervention to increase organ donor intention

Grant: The Medicaid Pharmacy Cost Containment and Patient Outcomes; 7/1/06-6/30/07; Center for Health and the Social Sciences - University of Chicago Pilot Grant (Alexander)

Purpose: To examine association between Medicaid cost-containment policies and clinical outcomes

Grant: Donald W. Reynolds Foundation; 9/1/03-8/31/07; National Institute of Aging (Sachs)

Purpose: Faculty Development in Geriatrics

Grant: Robert Wood Johnson Foundation Clinical Scholars Program; 7/1/03-7/1/06; Robert Wood Johnson Foundation (Lantos)

Purpose: To provide a post-residency academic program that trains scholars to apply pure research methods to health-related problems.

Grant: 1 H39 OT 00086-01; 10/01/01-09/30/04; Health Resources and Services Administration Division of Transplantation (Lang)

Purpose: To develop, implement, and assess a corporate workplace intervention designed to increase intention to become an organ donor

Grant: 5 K12 AG00488; 09/01/96-08/31/04; National Institute of Aging (Sachs)

Purpose: Geriatric Academic Program Award

ACADEMIC SERVICE

2018-	Honors and Awards Committee (Chair), Department of Epidemiology, JHSPH
2016	Faculty Search Committee (John Jackson), Department of Epidemiology, JHSPH
2015	Faculty Search Committee (Mara McAdams), Department of Epidemiology, JHSPH
2015	Faculty Search Committee, Johns Hopkins Berman Institute of Bioethics
2014-2015	Graduate Training Program in Clinical Investigation (GTPCI) Review Committee
2014-2017	Admissions and Credentials Committee, Department of Epidemiology, JHSPH
2014-	Technology Transfer Committee, JHSPH
2013-2017	Curriculum Committee, Department of Epidemiology, JHSPH
2010-2012	Diabetes Research and Training Center, University of Chicago
2006-2010	Biological Sciences Division Institutional Review Board Member
2006	Steering Committee, Conference on Pharmaceutical Policy, Chicago, Illinois
2006-2008	Steering Committee, DOM Research Day, University of Chicago
2006-2008	Steering Committee, UOC Program in Pharmaceutical Policy, University of Chicago
2005-2006	Search Committee, UOC Comprehensive Cancer Center, Population Science Director
2003-2012	MacLean Center Ethics Committee, University of Chicago
2003-2008	Medicine and the Social Sciences, Co-Chair, University of Chicago
2000-2001	General Medicine Interest Group, Co-Chair, UPHS
2000-2001	Residency Review Committee, Class Officer, UPHS
1999-2001	Hospital of the University of Pennsylvania Ethics Committee, UPHS
1996-1997	Rainbow Babies and Children's Hospital Ethics Committee, CWRU
1994-1996	Class Officer and Chair, Committee of Student Representatives, CWRU

INVITED SEMINARS OR ROUND TABLES

Local or Regional

- 1. Racial differences in access and outcomes of kidney transplantation. Workshop on medicine and the social sciences. University of Chicago. November 2002.
- 2. Public support for physician deception of insurance companies. Council on ethical and judicial affairs, American Medical Association. Chicago, IL. April 2003.
- 3. Truth and lies: are the rules different for lawyers? Panel discussion at the American Bar Association Conference on Professional Responsibility. May 2003.
- 4. Patient-physician communication about out-of-pocket costs. Northwestern University, December 2002.
- 5. Patient-physician communication about out-of-pocket costs. Program in Medicine, Arts, and the Social Sciences. University of Chicago. Feb 2004.
- 6. Patient-physician communication about out-of-pocket costs. Program in Medicine, Arts, and the Social Sciences. University of Chicago. February 2004.
- 7. Is prescription choice rational? By whose standards? Pharmaceutical innovation and regulation: an American dilemma. Faculty workshop, University of Chicago. February 2004.
- 8. The doctor-patient relationship in the post-managed care era. American Medical Association. Chicago, IL. May 2004.
- 9. National trends in Cox-2 inhibitor use since market release: the non-selective diffusion of a selectively cost-effective innovation. Center for Pharmacoeconomics Research, University of Illinois School of Pharmacy. July 2004.
- 10. Division of Geriatrics Grand Rounds, University of Chicago Hospitals. A framework for medication prioritization and discontinuation. December 2004.
- 11. Department of Medicine Grand Rounds, University of Chicago Hospitals. Pharmaceutical innovation and the doctor-patient relationship: understanding the diffusion of Cox-2 inhibitors from 30,000 feet to the ground level. February 2005.
- 12. Bioethics Interest Group, Stritch School of Medicine, Layola University. Physician deception of insurance companies. April 2005.
- 13. Midwest Center for Health Services and Policy Research. Hines Veterans Affairs System, Hines, IL. The diffusion of pharmaceutical innovation in the Veterans Affairs Health System. November 2005.
- 14. American Medical Student Association Panel Discussion. Pritzker School of Medicine, University of Chicago. Discussed role of industry in physician education and prescribing. November 2005.
- 15. Bioethics Interest Group. Pritzker School of Medicine, University of Chicago. Empiric ethics . . . or . . . what do numbers have to do with right and wrong? February 2006.

- 16. Chicago Medical Society. Panel discussion on medical ethics. Holiday Inn Chicago Mart Plaza. Chicago, IL. March 2006.
- 17. Ethics dinner discussion with students from Pritzker Medical School, University of Chicago, May 2006.
- 18. The road less traveled career paths in general internal medicine. National Youth Leadership Forum on Medicine, Chicago, IL. June 2006.
- 19. The Union League. Ethics considerations in pandemic planning. Chicago, IL. October 2006.
- 20. Attention: You have just entered the cost-sharing era: ethical, policy, and clinical considerations. Department of Medicine Research Series, December 2006.
- 21. Pharmacothis and pharmacothat: exploring topics in pharmaceutical research. University of Chicago Division of General Medicine Outcomes Group. March 2007.
- 22. Thinking globally, acting locally: a Chicagoland collaboration to unravel the impact of the Medicare Prescription Drug Benefit. TAP Pharmaceuticals. Chicago Midwest ISPOR Meeting. April 2007.
- 23. What do general internists do, and why? National Youth Leadership Forum on Medicine, Chicago, IL. June 2007.
- 24. The best of times, the worst of times: clinical decision-making and prescription choice in the 21st Century. Department of Otolaryngology. University of Chicago. October 2007.
- 25. What do we know about health care provider interaction with the pharmaceutical industry? University of Illinois Medical Center at Chicago Clinical Ethics Conference. March 2008.
- 26. Asking the right question(s) and getting funded to do so. University of Illinois at Chicago Advanced methods and grant writing workshop. March 2008.
- 27. Challenges and opportunities examining the off-label use of prescription medicines. Institute for Healthcare Studies. Northwestern University, Chicago, IL, May 2008.
- 28. Improving pharmacotherapy during outpatient care. Primary care medicine today (PRIMED) conference. Rosemont, IL, February 2009.
- 29. Choosing a research question: the perennial dilemma of "what shall I study"? Midwest Hospitalist Meeting. Chicago, IL. October 2009.
- 30. Conflicts of interest in medicine. Pritzker School of Medicine, University of Chicago. May 2010.
- 31. Using social network methods to study prescription drug uptake and diffusion. Department of Health Studies. University of Chicago. November 2010.
- 32. Managing risk through ethical practice. ISMIE Mutual Insurance Company. Chicago, IL 2010.
- 33. Overview of Clinical Epidemiology, in Fundamentals of Epidemiology. Johns Hopkins Krieger School of Arts and Sciences. November 2012.

- 34. The Prescription Opioid Epidemic: In Search of Mission Control.
 - Johns Hopkins Welch Center for Prevention, Epidemiology and Clinical Research Grand Rounds. December 2012.
 - University of Maryland Department of Pharmaceutical Health Services Research. April 2013.
 - Johns Hopkins Department of Medicine Osler Grand Rounds, October 2013.
 - Anne Arundel Medical Center Department of Medicine Grand Rounds, January 2014.
- 35. Drugs and Aging, in Epidemiology of Aging. Johns Hopkins Bloomberg School of Public Health. May 2013.
- 36. Career Development, in Public Health Economics Seminar. Johns Hopkins Bloomberg School of Public Health. September 2013.
- 37. The Effect of FDA Risk Communications on Patient, Provider and Firm Behavior. Johns Hopkins Department of Psychiatry Research Conference, December 2013.
- 38. Managing Prescription Opioids In Workers Compensation Programs. American Insurance Association. Washington, DC. June 2014.
- 39. Secondary Data Analysis. General Internal Medicine Fellows Conference. Johns Hopkins Medicine. Baltimore, MD. September 2014.
- 40. Center for Medical Technology Policy (CMTP) Green Park Collaborative Annual Meeting. "Real World Evidence Defining What "Good" Looks Like". Panel Discussion. April 2015.
- 41. Safety, Efficacy and Pharmacokinetic Bioequivalence of Biosimilar TNF-α Inhibitors Compared with their Reference Biologics: A Systematic Review. Department of Clinical Pharmacology, Johns Hopkins Hospital. February 2016.
- 42. Reducing Prescription Drug Spending: A Review of Policy Options. Johns Hopkins Bloomberg School of Public Health. March 2016.
- 43. Keynote. Managing the Unmanageable: Reining in the Opioid Epidemic. CareFirst. Baltimore, Maryland, June 2017.
- 44. Moderator. Epidemiology Inclusion, Diversity, Equity & Science (Epi IDEAS) Communication with Policy Makers: The Opioid Epidemic. Panel Discussion featuring Lauren Jee and Amanda Latimore. Johns Hopkins Bloomberg School of Public Health. Baltimore, Maryland, January 2019.
- 45. Round Table Participant. National Center for Health Statistics. Data Dissemination of New Data: Alignment of Infrastructure Improvements on Opioid Use and Overdose with Researchers' Needs and Interests. Rockville, Maryland, July 2019.
- 46. Johns Hopkins Department of Pathology Symposium. The Opioid Epidemic. Baltimore, Maryland, September 2019.
- 47. Johns Hopkins Department of Epidemiology. Pivotal Trials for FDA-Approved Novel Therapeutic Agents: How Good is the Science, and What Does It Cost? Baltimore, Maryland, September 2019.

National or International

- 48. Panel discussion of interdisciplinary health professions education. Ohio League of Nursing Annual Meeting, Cleveland, Ohio, October 1996.
- 49. Grand Rounds, Department of Medicine, University of Pennsylvania: Pharmaceutical industry sponsorship of continuing medical education: training physicians or marketing products? June 2001.
- 50. Patient-physician communication about out-of-pocket costs. University of Michigan, January 2003.
- 51. Patient-physician communication about out-of-pocket costs. MetroHealth Medical Center, January 2003.
- 52. "Luxury care", professional standards, and personal choice: ethical and professional issues in retainer medical practices. Panel discussion at the American Society of Bioethics and Humanities Annual Meeting. October 2004.
- 53. Ad hoc pharmacoeconomics working group. AstraZeneca LP. Patient-physician communication about out-of-pocket costs. June 2005.
- 54. How much should \$38 billion buy? The uptake and impact of the Medicare Part D Prescription Benefit. Department of Medicine. VA Center for Health Equity Promotion and Research and University of Pittsburgh Department of Medicine. December 2007.
- 55. The Medicare Modernization Act Prescription Drug Benefit. Department of Ambulatory Care and Prevention, Harvard Medical School. January 2008.
- 56. Principles of survey research. Patan Academy of Health Sciences. Kathmandu, Nepal, April 2008.
- 57. Health care publishing in the peer-reviewed literature. Patan Academy of Health Sciences. Kathmandu, Nepal, April 2008.
- 58. Impact of FDA regulatory advisories on patient, provider and firm behavior. Mayo Clinic, April 2010; Virginia Commonwealth University, October 2010; Yale University, November 2010; Johns Hopkins University School of Medicine, November 2010; Johns Hopkins University School of Public Health, June 2011.
- 59. Special Guest: FED UP: Rally for a Federal Response to the Opioid Epidemic, National Sylvan Theater Stage at the Washington Monument, Washington DC, September 2014.
- 60. Panelist: Art and Science of Scientific Communications. CBI Advanstar. Publication Planning Forum. Philadelphia, PA. December 2014.
- 61. CMS Grand Rounds: The Opioid Epidemic. CMS Headquarters, Baltimore, MD. November 2015.
- 62. Panelist: Drug Safety and Surveillance. FDA/CMS Summit. IIR/IBC Life Sciences. Ritz Carlton Hotel, Washington DC, December 2015.
- 63. Special Guest: The Opioid Epidemic. American Insurance Association: Workers' Compensation Committee. Washington DC, February 2015.

- 64. Safety, Efficacy and Pharmacokinetic Bioequivalence of Biosimilar Tumor Necrosis Factor-alpha Inhibitors Compared with their Reference Biologics: A Systematic Review. Harvard Pilgrim Health Care. March 2016.
- 65. The Opioid Epidemic. Johns Hopkins Department of Pharmacy Grand Rounds. May 2016.
- 66. Guest Speaker: Innovations in Diabetes Care. Academy of Managed Care Pharmacy. Alexandria, Virginia, July 2016.
- 67. Panelist: Needed Changes in Federal Policy and Legislation to Address Nation's Opioid Crisis. Educational Briefing for Congressional Members and Staff. Washington, DC, September 2016.
- 68. Panelist: Balancing Opioid Access and Use. Academy of Managed Care Pharmacy Annual Research Symposium. Alexandria, Virginia, October 2016.
- 69. Keynote. An Evidence-Based Approach to the Opioid Epidemic. National Academy for State Health Policy. Pittsburgh, Pennsylvania, October 2016.
- 70. Special Guest Speaker. Science, Public Health and the Prescription Opioid Industry. Motley Rice LLC. Washington, DC, June 2017.
- 71. Guest Speaker. Opioid Prescribing Practices. Bloomberg Philanthropies. January 2018.
- 72. Plenary Speaker. Conundrums in Biotechnology: How Does Quality Impact Safety. World Congress of Biopharmaceuticals. Washington, DC, February 2018.
- 73. Special Invited Speaker. "Covering the Opioid Crisis". National Press Foundation. Washington, DC, February 2018.
- 74. Guest Panelist. "Addressing Prescription Drug Costs". Johns Hopkins Carey School of Business Drug Accessibility and Pricing Symposium. Baltimore, MD, March 2018.
- 75. Guest Panelist. "Best Practices in Opioid Prescription, Pain Management, Medicine-Assisted Treatment and Recovery: New Models of Care for Opioid Use Disorder". Modern Healthcare Opioid Symposium. Baltimore, MD, April 2018.
- 76. Invited Speaker. "Comparative Safety of NSAIDs and Opioids Among Hospitalized Patients: A Case Study". Premier Annual Breakthroughs Conference. Nashville, TN, June 2018.
- 77. Guest Speaker. National Governor's Association. Opioid Coverage Policy Roundable. Washington, DC, June 2018.
- 78. Invited Panelist. National Black Caucus Foundation. Protecting the Health, Safety and Security of African American Communities. Health and Wellness Luncheon. Washington, DC, September 2018.
- 79. Session Moderator. State Legislative Leaders Foundation (SLLF) Fall Issues Summit. Addressing the Opioid Crisis. Baltimore, MD, September 2018.

- 80. Panelist. "Addiction Research What is New and What is Interesting?" and "Why Recovery Research Matters and Why Residents and Alumni Should Participate". Oxford House World Convention. Kansas City, MO, October 2018.
- 81. Facilitator. Academy of Managed Care Pharmacy Partnership Forum: "Building the Foundation for Patient-Reported Outcomes: Infrastructure and Methodologies". Orlando, FL, November 2018.
- 82. Invited Panelist. National Academies of Science, Engineering and Medicine. "The Role of Nonpharmacological Approaches to Pain Management." Washington, DC, December 2018.
- 83. Medicine Grand Rounds. Weill Cornell Medicine. "The Opioid Epidemic: Grief and Hope in the New Year". New York, NY, January 2019.
- 84. Invited Panelist. OpioidX: New Approaches to Addressing the Opioid Crisis. MIT Sloan School of Management. Laboratory for Financial Engineering. Boston, MA, March 2020.

NARRATIVE

G. Caleb Alexander, MD, MS is a Professor of Epidemiology and Medicine at Johns Hopkins Bloomberg School of Public Health, where he serves as a founding co-Director of the Center for Drug Safety and Effectiveness and Principal Investigator of the Johns Hopkins Center of Excellence in Regulatory Science and Innovation (CERSI). He is a practicing general internist and pharmacoepidemiologist and is internationally recognized for his research examining prescription drug utilization, safety and effectiveness. Dr. Alexander is the author of over 275 scientific articles and book chapters, many using primary or secondary data to characterize the epidemiology of prescription opioid use in the United States as well as to evaluate the effect of federal and state regulatory and payment policies on opioid prescribing, dispensing and utilization. He has extensive experience disseminating these findings to both professional and lay audiences and has testified in front of both the U.S. House of Representatives and the U.S. Senate regarding his team's work. He is also one of three editors of a widely cited monograph produced by the Johns Hopkins Bloomberg School of Public Health that has provided comprehensive and concrete, evidence-based recommendations for addressing the opioid epidemic. Dr. Alexander received his B.A. cum laude from the University of Pennsylvania, an MD from Case Western Reserve University, and a Master of Science from the University of Chicago.

KEYWORDS

Pharmacoepidemiology, pharmaceutical policy, regulation, internal medicine, opioids, opioid use disorder